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CLAIMS

What is claimed is:

1. A window adapted to be integrally formed with a composite
5 skin of a mobile platform, comprising:
 - a first transparent fiberglass layer;
 - a second transparent fiberglass layer; and
 - a transparent epoxy layer between the first and second transparent
10 fiberglass layers;wherein the first and second transparent fiberglass layers have an
index of refraction at least approximately matching an index of refraction of the
transparent epoxy layer; and
wherein the first and second transparent fiberglass layers are
15 adapted to be integrally formed with the panel of the mobile platform.
2. The window of claim 1, further comprising a glass outer-pane
removably coupled to the first transparent fiberglass layer such that the glass
outer-pane covers the first transparent fiberglass layer.
- 20 3. The window of claim 1, further including at least one tubular
composite sill adapted to be coupled to the panel of the mobile platform, the first
and second transparent fiberglass layers being secured to said composite sill.
4. The window of claim 1, further including a pair of tubular
25 composite sills adapted to be coupled to the panel of the mobile platform, the first
and second transparent fiberglass layers extending between the pair of tubular
composite sills.
5. The window of claim 1, wherein the transparent epoxy layer
30 comprises an aliphatic epoxy.

6. An aircraft comprising:

an outer skin having an outer layer and an inner layer, the outer skin supported on a sill; and

5 a window having a first transparent layer, a second transparent layer, and a transparent epoxy layer between the first and second transparent layers, the first and second transparent layers have an index of refraction matching an index of refraction of the transparent epoxy layer;

10 wherein the first transparent layer is bonded to the outer layer and the second transparent layer is bonded to the inner layer.

7. The aircraft of claim 6, further including a glass outer-pane coupled to the first transparent fiberglass layer.

15 8. The aircraft of claim 6, wherein the transparent epoxy layer comprises an aliphatic epoxy.

20 9. The aircraft of claim 6, wherein the refraction index of the first transparent layer, the second transparent layer, and the transparent epoxy layer is approximately the same.

10. The aircraft of claim 6, further comprising a second tubular composite sill, the window extending between the two tubular composite sills.

25 11. The aircraft of claim 6, wherein the first transparent layer and the second transparent layer are comprised of fiberglass.

12. Method of integrally forming a window within an opening in a panel structure, comprising:

5 providing a window having a first transparent layer, a second transparent layer, and a transparent epoxy layer between the first and second transparent layers;

providing a panel structure having an opening formed therethrough with a first plastic layer and a second plastic layer;

inserting the window into the opening;

10 securing the first transparent layer to the first plastic layer such that the material of the first transparent layer commingles with the material of the first plastic layer; and

securing the second transparent layer to the second plastic layer such that the material of the second transparent layer commingles with the material of the second plastic layer.

13. The method of claim 12, further comprising removably fastening a glass outer-pane to the first transparent layer such that the glass outer-pane covers the first transparent layer.

20 14. The method of claim 12, wherein the transparent epoxy layer comprises an aliphatic epoxy.

25 15. The method of claim 12, wherein the refraction index of the first transparent layer, the second transparent layer, and the transparent epoxy layer is approximately the same.